



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,857	07/09/2001	Yang Pang	COHL-4340	9106
7590	10/06/2003		EXAMINER	
STALLMAN & POLLACK ATTN: MICHAEL A. STALLMAN 121 SPEAR STREET SUITE 290 SAN FRANCISCO, CA 94105			JACKSON, CORNELIUS H	
			ART UNIT	PAPER NUMBER
			2828	
			DATE MAILED: 10/06/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/901,857	PANG ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Cornelius H. Jackson	2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 14 August 2003.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 6-11 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 6-11 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
PAUL IP  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Acknowledgment***

1. Acknowledgment is made that applicant's Amendment, filed on 14 August 2003, has been entered. Upon entrance of the Amendment, claim 6 was amended and claims 2-5 and 18 were cancelled. Claims 6-11 are now pending in the present application.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 August 2003 has been entered.

***Response to Arguments***

3. Applicant's arguments with respect to claims 6-11 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite since the preamble fails to identify what the claimed invention is. Examiner views claim 6 as, a laser comprising a laser plus other elements.

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: how the plurality of optical components work together with one another and with the other cited elements (such as the enclosure, gas conditioning arrangement, pump, etc.) to form a laser.

Claims 7-11 are rejected since they depend on an indefinite base claim.

8. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: resonate cavity, gain medium, power supply, etc. Claims 7-11 are rejected since they depend on an indefinite base claim.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepburn (3789320). Regarding claim 6, Hepburn teaches a gas laser circulation system **Fig. 1** comprising: a sealed enclosure; a plurality of optical components located in a gaseous atmosphere within said enclosure said optical components including components of a laser generating optical radiation, said optical components releasing water vapor and organic vapors into said gaseous atmosphere, and with particulate matter being generated by interaction of said optical radiation with one or more of said water vapor and said organic vapors; a gas conditioning arrangement including a desiccant medium, a medium for trapping vapors, and a filter for trapping particulate matter; a pump, said pump in fluid communication with said enclosure via a first conduit and in fluid communication with said gas conditioning arrangement via a second conduit and said gas conditioning arrangement being in fluid communication with said enclosure via a third conduit; said pump being arranged to extract gas from said enclosure via said first conduit and deliver said extracted gas to said gas conditioning arrangement via said second conduit; and said gas conditioning arrangement being configured such that said extracted gas delivered thereto by said pump passes through said desiccant

medium, said organic vapor trapping medium, and said filter and is then returned to said enclosure via said third conduit and operated only in a manner intended to reduce water vapor, organic vapor and particulate matter from said gaseous atmosphere, **see col. 1, line 44-col. 2, line 6.** Hepburn fails to teach that the extracted gas passes through said desiccant medium, said organic vapor trapping medium, and said filter in the stated sequence, instead Hepburn teaches that the arrangement in which the gas passes through said desiccant medium, said organic vapor trapping medium, and said filter may be varied, **see col. 2, lines 7-10.** It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the filtering materials in any desired order, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Also, it has been held “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 7, Hepburn teaches the desiccant medium is silica gel, **see col. 1, lines 44-64.**

Regarding claim 10, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 8, 9 and 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hepburn (3789320) as applied to claims 6, 7 and 10 above, and further in view of Shah et al. (6428608). Hepburn fails to teach the material use for the organic trapping

medium and a fourth and fifth conduits and first and second valves, said fourth and fifth conduits and said valves arranged such that a drying gas can be passed through said desiccant medium for regenerating the desiccant medium while preventing said drying gas from entering said enclosure.

Regarding claims 8 and 9, Shah et al. teach the organic trapping medium may be activated carbon or molecular sieve, **see col. 9, lines 21-39.**

Regarding claim 11, Shah et al. teach further including fourth and fifth conduits and first and second valves, said fourth and fifth conduits and said valves arranged such that a drying gas can be passed through said desiccant medium for regenerating the desiccant medium while preventing said drying gas from entering said enclosure, **see col. 4, lines 36-67.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Shah et al.'s air quality controlling invention with the teachings of Hepburn's gas laser circulation system, to desorb the vapor absorbed by the desiccant medium and/or organic vapor trapping medium, **see col. 4, lines 15-35 and col. 10, lines 48-59.**

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dosi et al. disclose a similar invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



chj

September 22, 2003



PAUL IP  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800